

WHAT IS CLAIMED IS:

1. A universal power supply (UPS) system, comprising:
  - a device circuit, wherein the device circuit comprises
    - a device ID code unit, storing a device ID code of the device circuit, and
    - 5 a power input interface, used to transmit a needed power to the device circuit;
  - a UPS unit, wherein the UPS unit comprises
    - a voltage supply unit,
    - 10 a device ID detecting unit that can detect the device ID code stored in the device ID code unit of the device circuit, and
    - a voltage control unit, that controls the voltage unit to supply a power type of the needed power, according to the device ID code; and
    - a standard interface unit, coupled between the device circuit and the UPS unit, to supply the needed power to the device circuit and transmitting the device ID code.
- 15 2. The UPS system of claim 1, wherein the voltage supply unit comprises a rechargeable battery associated with a charger.
3. The UPS system of claim 1, wherein the voltage supply unit of the UPS unit comprises a power transforming apparatus, allowing it to transform a power from an external public power source into a battery-type power.
- 20 4. The UPS system of claim 1, wherein the standard interface unit comprises:
  - a standard connector, having a standardized size and comprising a plurality of plug holes, the plug holes being defined with functions according to a type of the device circuit; and

a multi-wire cable, coupled between the device circuit and the UPS unit, with respect to the plug holes.

5. The UPS system of claim 4, wherein the multi-wire cable, comprises a power line, a grounded line, a device ID signal line, and a safety signal line, wherein the power line is used to transmit the needed power, the device ID signal line is used to transmitted the device ID code, the safety signal line is used to transmit a safety signal.

6. A universal power supply (UPS), which can provide a needed power to a device circuit through an interface device, the UPS comprising:

10 a voltage supply unit;  
a device ID detecting unit that can detect an ID code of the device circuit through the interface device; and  
a voltage control unit that supplies the needed power to the device circuit through the interface device.

15 7. The UPS of claim 6, wherein the voltage supply unit comprises a rechargeable battery associated with a charger.

8. The UPS of claim 6, wherein the voltage supply unit comprises a power transforming apparatus, allowing it to transform a power from a external public power source into a battery-type power.

9. The UPS of claim 6, comprising an input/output end which comprises a plurality of plug holes, wherein the plug holes at least include a power plug hole, a grounded plug hole, a device ID code signal plug hole, and a safety signal plug hole, wherein the power plug hole can provide the needed power, the device ID code signal plug hole can be used to transmit the ID code, and the safety signal plug hole can be used to transmit a safety signal.

10. A universal power supply (UPS) system, comprising:
  - a device circuit;
  - a UPS unit; and
  - a standard interface unit, coupled between the device circuit and the UPS unit,
- 5 thereby to supply a needed power to the device circuit.
11. A method for supplying power to a device circuit, comprising:
  - pre-setting a device ID code to the device circuit;
  - detecting the device ID code, to recognize a power type needed by the device circuit;
  - 10 providing a power source apparatus; and
  - controlling the power source apparatus, according to the power type, to supply a power to the device circuit.
12. The method of claim 11, further comprising detecting a status for supplying power to the device circuit, to determine whether the status is under a normal condition.